#### UNITED STATES PATENT AND TRADEMARK OFFICE

# **CERTIFICATE OF CORRECTION**

PATENT NO. : 7,897,597 B2

APPLICATION NO. : 10/595103 DATED : March 1, 2011 INVENTOR(S) : Kyle J Lindstrom

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

#### **List of References**

- <u>Title Page 5, Col. 2 (Other Publications), Line 2</u> Delete "Ammonial/Potassium" and insert -- Ammonia/Potassium --, therefor.
- <u>Title Page 6, Col. 1 (Other Publications), Line 21</u> Delete "a," and insert -- al., --, therefor.
- <u>Title Page 6, Col. 1 (Other Publications), Line 62</u> Delete "at," and insert -- al., --, therefor.
- <u>Title Page 6, Col. 2 (Other Publications), Line 43</u> Delete "of" and insert -- et --, therefor.
- <u>Title Page 6, Col. 2 (Other Publications), Line 53</u> Delete "al," and insert -- al., --, therefor.
- <u>Title Page 6, Col. 2 (Other Publications), Line 55</u> Delete "Chmica" and insert -- Chimica --, therefor.
- <u>Title Page 7, Col. 1 (Other Publications), Line 12</u> Delete "a," and insert -- al., --, therefor.
- <u>Title Page 7, Col. 2 (Other Publications), Line 28</u> Delete "Hydocarbons" and insert -- Hydrocarbons --, therefor.
- <u>Title Page 7, Col. 2 (Other Publications), Line 62</u> Delete "Napthyridines Hydroxynaphthyridies," and insert -- Naphthyridines Hydroxynaphthyridines, --, therefor.
- <u>Title Page 8, Col. 1 (Other Publications), Line 6</u> Delete "Gessellschaft" and insert -- Gesellschaft --, therefor.
- <u>Title Page 8, Col. 1 (Other Publications), Line 40</u> Delete "al," and insert -- al., --, therefor.

Signed and Sealed this Twenty-first Day of June, 2011

David J. Kappos

Director of the United States Patent and Trademark Office

- <u>Title Page 8, Col. 1 (Other Publications), Line 68</u> Delete "Stablized" and insert -- Stabilized --, therefor.
- <u>Title Page 8, Col. 2 (Other Publications), Line 7</u> Delete "nti-inflammatory" and insert -- anti-inflammatory --, therefor.
- <u>Title Page 9, Col. 1 (Other Publications), Line 47</u> Delete "Dermatologi;" and insert -- Dermatology; --, therefor.
- <u>Title Page 9, Col. 2 (Other Publications), Line 1</u> Delete "Structure-Activity" and insert -- Structure-Activity --, therefor.
- <u>Title Page 9, Col. 2 (Other Publications), Line 37</u> Delete "Imnnunol." and insert -- Immunol. --, therefor.
- <u>Title Page 9, Col. 2 (Other Publications), Line 56</u> Delete "Hely" and insert -- Helv --, therefor.
- <u>Title Page 10, Col. 1 (Other Publications), Line 17</u> Delete "2-arlypyrazolo" and insert -- 2-arylpyrazolo --, therefor.
- <u>Title Page 10, Col. 1 (Other Publications), Line 24</u> Delete "imizazo" and insert -- imidazo --, therefor.
- <u>Title Page 10, Col. 1 (Other Publications), Line 25</u> Delete "nucleosides:fficient" and insert -- nucleosides: efficient --, therefor.
- <u>Title Page 10, Col. 1 (Other Publications), Lines 53-54</u> Delete "Assymmetry." and insert -- Asymmetry. --, therefor.
- <u>Title Page 10, Col. 1 (Other Publications), Line 60</u> Delete "Bacteroids" and insert -- Bacteroides --, therefor.
- <u>Title Page 10, Col. 2 (Other Publications), Line 35</u> Delete "lipoiygenase" and insert -- lipoxygenase --, therefor.
- <u>Title Page 11, Col. 2 (Other Publications), Line 1</u> Delete "IsosteriC" and insert -- Isosteric --, therefor.
- <u>Title Page 11, Col. 2 (Other Publications), Line 5</u> Delete "at.," and insert -- al., --, therefor.
- <u>Title Page 11, Col. 2 (Other Publications), Line 6</u> Delete "Tray" and insert -- Trav --, therefor.

U.S. Pat. No. 7,897,597 B2

• <u>Title Page 11, Col. 2 (Other Publications), Line 58</u> - Delete "ofHeterocyclic" and insert -- of Heterocyclic --, therefor.

#### **Specification**

- Column 4, Line 24, Delete "- $N(R_8)C(R_6)$ -" and insert -- - $N(R_8)-C(R_6)$  --, therefor.
- Column 4, Line 32, Delete "substitutents;" and insert -- substituents; --, therefor.
- Column 6, Line 5, After "of" insert --: --.
- Column 11, Line 41, Below "- X'-R<sub>4-1</sub>," insert -- -X'-Y'-R<sub>4</sub>, --.
- Column 15, Line 33, Delete "C-," and insert -- O-, --, therefor.
- Column 17, Line 46, Delete "substitutent." and insert -- substituent. --, therefor.
- <u>Column 19, Line 1, -</u> Delete "-2#-" and insert -- -2H- --, therefor.
- Column 19, Line 11, Delete "- $C(R_{61})$ -," and insert -- - $C(R_6)$ -, --, therefor.
- <u>Column 19, Lines 34-35, -</u> Delete "4-(1,1-dioxidoisothiazohdin-2-yl)butyl," and insert -- 4-(1,1-dioxidoisothiazolidin-2-yl)butyl, --, therefor.
- Column 19, Line 45, Delete " $Cl_{1-2}$ " and insert --  $C_{1-2}$  --, therefor.
- <u>Column 19, Lines 49-50, -</u> Delete "methylammocarbonylaminomethyl." and insert -- methylaminocarbonylaminomethyl. --, therefor.
- Column 20, Line 62, Before "some" insert -- In --.
- <u>Column 24, Line 43, -</u> Delete "-3-nitroquinolin" and insert -- -3-nitroquinoline --, therefor.
- Column 25, Line 67, Delete "3-amino" and insert -- 3-amido --, therefor.
- Column 26, Line 17, Delete "L" and insert -- I, --, therefor
- Column 26, Line 19, Delete "-5H-" and insert -- -5N- --, therefor
- Column 26, Line 30, Delete "animated" and insert -- aminated --, therefor.
- Column 29, Line 18, Delete "n," and insert -- II, --, therefor.
- Column 29, Line 42, Delete "animated" and insert -- aminated --, therefor.

- Column 29, Line 49, Delete "TV-oxide" and insert -- N-oxide --, therefor.
- <u>Column 29, Line 54, Delete "men" and insert -- then --, therefor.</u>
- Column 30, Line 28, Delete "XXXI" and insert -- XXXI, --, therefor.
- <u>Column 30, Line 46, Delete "N</u>—O" and insert -- N=C=O --, therefor.
- Column 30, Line 64, Delete "R<sub>9</sub>," and insert -- R<sub>8</sub>, --, therefor.
- Column 33, Line 50, Delete "animated" and insert -- aminated --, therefor.
- Column 34, Line 60, Delete "Ar," and insert -- Ar' --, therefor.
- Column 36, Line 41, Delete "animated" and insert -- aminated --, therefor.
- Column 37, Line 2, Delete "inline" and insert -- imine --, therefor.
- <u>Column 38, Line 64, Delete "animated" and insert -- aminated --, therefor.</u>
- Column 39, Line 62, Delete "Methylamine" and insert -- triethylamine --, therefor.
- Column 41, Line 41, Delete "(TL)." and insert -- (IL). --, therefor.
- Column 41, Line 43, Delete "DL-1," and insert -- IL-1, --, therefor.
- Column 42, Line 39, Delete "HSV-H," and insert -- HSV-II, --, therefor.
- Column 42, Line 47, Delete "flavdvirus" and insert -- flavivirus --, therefor.
- <u>Column 42, Lines 60-61, -</u> Delete "histoplasmonsis," and insert -- histoplasmosis, --, therefor.
- <u>Column 42, Lines 62-63, -</u> Delete "carnii pneomonia," and insert -- carinii pneumonia, --, therefor.
- <u>Column 42, Line 67, -</u> Delete "Karposi's" and insert -- Kaposi's --, therefor.
- <u>Column 43, Line 9, -</u> Delete "Ommen's syndrome," and insert -- Omenn's syndrome, --, therefor.
- Column 43, Line 25, Delete "hemophilus" and insert -- haemophilus --, therefor.
- Column 44, Line 52, Delete "phenylamino" and insert -- phenylimino --, therefor.

- Column 44, Line 60, Delete "phenylamino" and insert -- phenylimino --, therefor.
- <u>Column 46, Line 40, -</u> Delete "1.5" and insert -- 7.5 --, therefor.
- Column 47, Line 59, Delete "an" and insert -- as an --, therefor.
- <u>Column 48, Line 44, Delete "quinolin" and insert -- quinoline --, therefor.</u>
- Column 49, Line 63, Delete "(d" and insert -- (d, J= --, therefor.
- Column 53, Line 16, Delete "w/z" and insert -- m/z --, therefor.
- <u>Column 53, Line 57, Delete "-1/Z-" and insert -- -1H- --, therefor.</u>
- <u>Column 55, Line 45, -</u> Delete "-2-pro" and insert --2-propyl-1H-imidazo[4,5-c]quinolin-4-amine --, therefor.
- <u>Column 55, Line 58, -</u> Delete "(trifluromethyl)" and insert -- (trifluoromethyl) --, therefor.
- <u>Column 55, Lines 62-63, -</u> Delete "(trifluromethyl)" and insert -- (trifluoromethyl) --, therefor.
- <u>Column 56, Line 21, -</u> Delete "(t, 7=" and insert -- (t, J= --, therefor.
- <u>Column 62, Line 49, Delete "(septet 7=") and insert -- (septet J= --, therefor.</u>
- Column 62, Line 49, Delete "(t, 7=")" and insert -- (t, J= --, therefor).
- Column 64, Line 17, Delete "(d, 7=" and insert -- (d, J= --, therefor.
- Column 64, Line 20, Delete "(d, 7=" and insert -- (d, J= --, therefor.
- Column 64, Line 21, Delete "(q, 7=")" and insert -- (q, J= --, therefor).
- Column 64, Line 21, Delete "(septet, 7=" and insert -- (septet, J= --, therefor.
- Column 64, Line 22, Delete "(t, 7=" and insert -- (t, J= --, therefor.
- Column 64, Line 22, Delete "(d, 7=" and insert -- (d, J= --, therefor.
- Column 65, Line 11, Delete "(d, 7=" and insert -- (d, J= --, therefor.
- Column 65, Line 12, Delete "(d, 7=" and insert -- (d, J= --, therefor.
- Column 65, Line 13, Delete "(d, 7=" and insert -- (d, J= --, therefor.

- Column 65, Line 14, Delete "(q, 7=")" and insert -- (q, J= --, therefor).
- Column 65, Line 14, Delete "(septet, 7=" and insert -- (septet, J= --, therefor.
- Column 65, Line 15, Delete "(t, 7=")" and insert -- (t, J= --, therefor).
- Column 66, Line 27, Delete "(d, 0.7=" and insert -- (d, J= --, therefor.
- Column 68, Line 2, Delete "by/7-" and insert -- by p- --, therefor.
- Column 70, Line 45, Delete "g" and insert -- g, --, therefor.
- <u>Column 70, Line 47, -</u> Delete "dichloromethane methanol" and insert -- dichloromethane:methanol --, therefor.
- <u>Column 72, Line 19, -</u> Delete "(3-nitrophenoxy-2-" and insert -- (3-nitrophenoxy)-2- --, therefor.
- Column 76, Line 8, Delete "-imidazo" and insert -- imidazo[4,5-c]quinoline --, therefor.
- Column 78, Line 63, Delete "TV-" and insert -- N- --, therefor.
- Column 79, Line 33, Delete "7V" and insert -- N- --, therefor.
- Column 81, Line 59, Delete "(pentet," and insert -- (pentet, J= --, therefor.
- Column 81, Line 62, Delete "8159.0," and insert --  $\delta$ 159.0, --, therefor.
- Column 84, Line 30, After "(2-methoxyethyl)" delete "-1H".
- Column 86, Line 48, Delete "added," and insert -- added --, therefor.
- Column 89, Line 17, Delete "7V'-" and insert -- N- --, therefor.
- Column 89, Line 18, Delete "-N<sup>4</sup>-" and insert -- -N- --, therefor.
- <u>Column 89, Line 21, -</u> Delete "-5-" and insert -- -3- --, therefor.
- Column 89, Line 59, Delete "H" and insert -- I --, therefor.
- Column 90, Line 44, Delete "0° C.;" and insert--  $\sim$ 0° C.; --, therefor.
- Column 90, Line 64, Delete "quinolin" and insert -- quinoline --, therefor.
- <u>Column 91, Line 23, Delete "362.1134" and insert -- 362.1734 --, therefor.</u>

- Column 92, Line 2, Delete "animate" and insert -- aminate --, therefor.
- Column 92, Line 8, Delete "(d,7=")" and insert -- (d,J=--), therefor.
- Column 92, Line 13, Delete "5153.6," and insert --  $\delta$ 153.6, --, therefor.
- <u>Column 92, Line 43, -</u> Delete "-methylquinoline-" and insert -- -methylquinoline-3,4- --, therefor.
- Column 92, Line 49, Delete " $0^{\circ}$  C.," and insert --  $\sim 0^{\circ}$  C., --, therefor.
- Column 93, Line 14, Delete "quinolin" and insert -- quinoline --, therefor.
- <u>Column 94, Lines 42-43, -</u> Delete "dichloromemane:methanol)." and insert -- dichloromethane:methanol). --, therefor.
- Column 97, Line 41, Delete "quinolin e" and insert -- quinoline --, therefor.
- <u>Column 97, Line 53, -</u> Delete "(pentet," and insert -- (pentet, J= --, therefor.
- Column 98, Line 30, Delete "quinolin" and insert -- quinoline --, therefor.
- <u>Column 101, Line 7, -</u> Delete "-1/J-" and insert -- -1H- --, therefor.
- Column 101, Line 10, Delete "horn;" and insert -- hour --, therefor.
- <u>Column 102, Line 42, -</u> Delete "nitroquinoline" and insert -- Nitroquinoline-4-amine --, therefor.
- Column 103, Line 4, After "but the" delete "1".
- Column 106, Line 15, Delete "(APCI)/w/z" and insert -- "(APCI) m/z --, therefor.
- Column 108, Line 50, Delete ".0.20H<sub>2</sub>O:" and insert -- .0.20 H<sub>2</sub>O: --, therefor.
- <u>Column 111, Line 52, -</u> Delete "N{4" and insert -- N-{4 --, therefor.
- Column 113, Line 35, Delete "butyl}-" and insert -- butyl} --, therefor.
- Column 114, Line 43, Delete ".0.15H<sub>2</sub>O:" and insert -- .0.15 H<sub>2</sub>O: --, therefor.
- Column 115, Line 46, Delete "<sup>13</sup>H" and insert -- <sup>1</sup>H --, therefor.
- Column 116, Line 67, Delete "(t,7=")" and insert -- (t,J=")--, therefor.

## U.S. Pat. No. 7,897,597 B2

- <u>Column 120, Line 52, -</u> Delete ".0.25H<sub>2</sub>O:" and insert -- .0.25 H<sub>2</sub>O: --, therefor.
- Column 122, Line 40, Delete " $.0.50H_2O$ " and insert --  $.0.50H_2O$ : --, therefor.
- Column 122, Line 66, Delete ".0.25H<sub>2</sub>O:" and insert -- .0.25 H<sub>2</sub>O: --, therefor.
- Column 123, Line 24, Delete ".0.77H<sub>2</sub>O:" and insert -- .0.77 H<sub>2</sub>O: --, therefor.
- Column 123, Line 46, Delete " $.0.50H_2O$ :" and insert --  $.0.50H_2O$ : --, therefor.
- Column 124, Line 2, Delete " $.0.75H_2O$ " and insert --  $.0.75H_2O$ : --, therefor.
- Column 125, Line 3, Delete "Anal," and insert -- Anal. --, therefor.
- Column 126, Line 8, Delete "animate" and insert -- aminate --, therefor.
- Column 128, Line 44, Delete "H-" and insert -- N- --, therefor.
- Column 130, Line 39, Delete "5-c]" and insert --  $5-\alpha$ ] --, therefor.
- Column 131, Line 37, Delete "8-(Benzoyloxy)" and insert -- 8-(Benzyloxy) --, therefor.
- <u>Column 138, After Line 67, -</u> Insert
  - -- from acetonitrile to give 102 mg of 7-(furan-3-ylmethoxy)-2-methyl-1-(2-methylpropyl)-1H-imidazo[4,5-c]quinolin-4-amine as a white powder, mp 181.0-183.0. MS (APCI) m/z 351 (M+H)<sup>+</sup>;

Anal. Calcd. for C<sub>20</sub>H<sub>22</sub>N<sub>4</sub>O<sub>2</sub>.0.6 CH<sub>3</sub>CN: % C, 67.89; % H, 6.40; % N, 17.18. Found: % C, 67.72; % H, 6.67; %N, 16.95. ---.

- Column 140, Line 20, Delete " $.0.55H_2O$ " and insert --  $.0.55H_2O$ : --, therefor.
- Column 142, Line 17, Delete ".0.33H<sub>2</sub>O:" and insert -- .0.33 H<sub>2</sub>O: --, therefor.
- Column 142, Line 57, Delete "trietylamine," and insert -- triethylamine, --, therefor.
- Column 148, Line 66, Delete "amine," and insert -- amine. --, therefor.
- Column 153, Line 44, Delete ".0.5H<sub>2</sub>O:" and insert -- .0.5 H<sub>2</sub>O: --, therefor.
- Column 154, Lines 3-4, Delete "thiazoleHCl" and insert -- thiazole.HCl --, therefor.
- Column 157, Line 41, Delete "-benzoyloxy-" and insert -- -benzyloxy- --, therefor.
- Column 157, Line 61, Delete "trietylamine." and insert -- triethylamine. --, therefor.

## U.S. Pat. No. 7,897,597 B2

- <u>Column 158, Line 59, -</u> Delete "-1,1-" and insert -- -1-yl)-1,1- --, therefor.
- Column 160, Line 52, Delete "-methylethyl]-" and insert-- -dimethylethyl]- --, therefor.
- Column 165, Line 6, Delete "(q, 7=")" and insert -- (q, J= --, therefor).
- Column 165, Line 12, Delete " $.0.12H_2O$ " and insert --  $.0.12H_2O$ : --, therefor.
- <u>Column 167, Line 53, Delete "phenylamino"</u> and insert -- phenylimino --, therefor.
- Column 169, Line 35, Delete "7=" and insert -- J= --, therefor.
- Column 172, Line 47, Delete "Anal," and insert -- Anal. --, therefor.
- Column 172, Line 55, Delete "mmol." and insert -- mmol, --, therefor.
- Column 174, Line 4, Delete "Anal," and insert -- Anal. --, therefor.
- <u>Column 178, Line 14, Delete "acid/acetonitrile:" and insert -- acid/acetonitrile; --, therefor.</u>
- <u>Column 188, Line 61, -</u> Delete "phenylthiocarbamoyl" and insert -- phenylthiocarbamyl --, therefor.
- Column 191, Line 18, Delete "-2#-" and insert -- -2H- --, therefor.
- <u>Column 192, Line 6, -</u> Delete "animate" and insert -- aminate --, therefor.
- Column 203, Line 11, Delete "microliter" and insert -- microtiter --, therefor.

#### **Claims**

- <u>Column 205, Line 62, -</u> In Claim 1, delete "independently-selected" and insert -- independently selected --, therefor.
- Column 208, Line 20, In Claim 13, after "alkenyl" insert -- , --.
- Column 208, Line 36, In Claim 13, delete "front" insert -- from --, therefor.
- <u>Column 208, Line 51, -</u> In Claim 13, delete "independently-selected" and insert -- independently selected --, therefor.
- Column 209, Line 55, In Claim 21, delete "2-hydroxyl" and insert -- 2-hydroxy --, therefor.
- <u>Column 210, Line 27, -</u> In Claim 25, delete "-X-" and insert -- -X'- --, therefor.

- Column 212, Line 15, In Claim 25, delete "front" insert -- from --, therefor.
- Column 212, Line 40, In Claim 25, delete "that," and insert -- that --, therefor.
- <u>Column 212, Line 67, -</u> In Claim 27, delete "4-[(methasulfonyl)ammo]butyl," and insert -- 4-[(methylsulfonyl) amino]butyl, --, therefor.
- Column 213, Line 20, In Claim 33, after "biosynthesis" delete "in an animal".
- <u>Column 213, Line 38, -</u> In Claim 34, delete "-R<sub>4-1</sub>;" and insert -- -R<sub>4-1</sub>, --, therefor.
- Column 213, Line 39, In Claim 34, delete "-R<sub>4-1</sub>;" and insert -- -X'-R<sub>4-1</sub>, --, therefor.
- Column 213, Line 47, In Claim 34, delete "group," and insert -- group --, therefor.
- <u>Column 214, Line 45, -</u> In Claim 34, delete "alkylheteroarylenyl" and insert -- alkylheteroarylenyl, --, therefor.
- Column 214, Line 46, In Claim 34, delete "can the" and insert -- can be --, therefor.
- Column 214, Line 57, In Claim 34, after "alkynyl" insert -- , --.
- <u>Column 215, Line 20, -</u> In Claim 34, delete "-O and -S-;" and insert -- =O and =S; --, therefor.
- Column 215, Line 55, In Claim 35, delete "R<sub>4</sub>" and insert -- R<sub>4</sub> is --, therefor.
- <u>Column 216, Line 43, -</u> In Claim 36, delete "alkylamino, and" and insert -- alkylamino, and --, therefor.
- Column 216, Line 48, In Claim 36, delete "of;" and insert -- of: --, therefor.
- Column 218, Line 54, In Claim 38, delete "R5" and insert -- R<sub>5</sub> --, therefor.
- Column 220, Line 1, In Claim 43, delete "salf" and insert -- salt --, therefor.